

Appendix A – Consideration of Cost Implications of Adding Manganese to Part 261 Appendix VIII

EPA has received public comment on its proposal to add manganese as a hazardous constituent subject to universal treatment standards under 40 CFR §268.48 and as a hazardous constituent on Appendix VIII of 40 CFR Part 261. EPA is deferring the addition of manganese to the list of hazardous constituents subject to universal treatment standards in this rulemaking but is finalizing the proposal to add manganese to Appendix VIII. The Agency has evaluated commenters' claims about the costs and economic impacts of adding manganese to the list of hazardous constituents at 40 CFR Part 261 Appendix VIII. Based on consultations with individuals knowledgeable in hazardous waste treatment and corrective action, a review of the chemical properties of manganese, and review of RCRA regulations, the Agency does not believe that there are significant incremental costs or economic impacts associated with adding manganese to Appendix VIII. Commenters have contended that this addition would result in increased costs and economic impacts either because of the need to modify permits to add manganese as a hazardous constituent for groundwater monitoring or the possibility that manganese may become a constituent of concern at corrective action cleanups.

Regarding permit costs, EPA notes that a decision to modify a RCRA Part B permit to add a hazardous constituent to the groundwater monitoring provisions of the permit is discretionary for the permit writer. Groundwater monitoring hazardous constituents can be selected from Appendix VIII. However, facilities are not automatically required to monitor for all Appendix VIII constituents. In most cases, Appendix IX of 40 CFR Part 264 is used to identify the initial constituents for the groundwater detection program. The list of constituents to be monitored is determined at the discretion of the Regional or State Administrator. Disposal units subject to the groundwater monitoring requirements in 264.91 would not necessarily have new detection, monitoring, and corrective action requirements for manganese as a result of our final rule. Constituents and indicator parameters for detection monitoring are specified in a site-specific permit based on criteria set forth in 40 CFR 264.98(a)(1) to (4). If a release from the disposal unit is suspected, the facility must analyze for constituents identified on 40 CFR 264 Appendix IX. We did not propose to add manganese to Part 264 Appendix IX. For compliance monitoring and for corrective action, the facility must test for 40 CFR Appendix VIII constituents specified per 40 CFR 264.93, which requires that constituents must be (1) detected in ground water, and (2) reasonably expected to be in or derived from the waste. EPA may exclude Appendix VIII constituents based on the criteria of 40 CFR 264.93(b). Therefore, manganese may not necessarily be included in the compliance monitoring and for corrective action requirements for the reasons identified.

Discussions with one EPA Regional permit writer indicate that for the public commenter, Eastman Chemical, who raised the issue of potential Appendix VIII/permit modification costs, it is extremely unlikely that its permit would be modified merely to add a hazardous constituent.¹

¹ Personal Communication between Susan Burnell, USEPA, Office of Solid Waste and Leo Romanowski, USEPA Region IV, October 10, 2001.

The company had its permit reissued in September 2001. The Eastman permit does not reference Appendix VIII regarding hazardous constituents subject to groundwater monitoring. Manganese could be added to the Eastman permit when a permit modification is needed for some other issue. If the Region or State identifies other issues in the future that warrant permit modification, a decision would be made at that time regarding the appropriateness of adding manganese to the permit requirements. While some of the costs of this permit modification would be associated with new manganese monitoring requirement, they would not necessarily be attributable to this final rule as other authorities already exist for control of manganese and other non-Appendix VIII hazardous constituents.

EPA also notes that the universe of permitted facilities for which manganese is likely to be of concern is relatively small. Only 31 facilities reported having both manganese releases to land under the Toxic Release Inventory and a permitted RCRA Subtitle C landfill onsite. **[insert RTI cite]**. We reiterate, however, that permit writers have sufficient existing authority to require monitoring or remediation for manganese irrespective of whether manganese is on Appendix VIII.

Regarding corrective action cleanups, there also are no incremental costs associated with adding manganese to 40 CFR Part 261 Appendix VIII. If the Region or State has a concern about manganese at a site, the State or Region already has the authority to include manganese as a constituent of concern without it being added to Appendix VIII. Likewise, there is no requirement for manganese to be included in the corrective action just because it has been added to Appendix VIII. In all likelihood, if the remedial facility investigation (RFI) included others metals, then analytical data for manganese likely already exists in the required metals scans. We also note that manganese is already assessed during corrective action, as indicated by its presence in various tools used in hazardous waste site clean up. See, for example, tools available on Region III's web site (<http://www.epa.gov/reg3hwmd/risk/riskmenu.htm>). See also Region IX's preliminary remediation goals (http://www.epa.gov/region09/waste/sfund/prg/s1_04.htm). EPA Regions refer to both lists in evaluating constituents of concern at RCRA corrective action sites. As a further illustration of existing authority to require corrective action, see ^{PL3}[insert docket #] for a RCRA Facility Assessment for the Kerr-McGee facility in Hamilton, MS that is being drive by manganese releases. EPA also notes that some States such as New Jersey also include manganese on their list of constituents for groundwater monitoring and corrective action clean ups [insert citation for NJ regulations]. Manganese, then, is already a hazardous constituent considered in the context of corrective action. Therefore, its addition to 40 CFR Part 261 Appendix VIII does not create any new requirement to consider manganese in clean ups.